In the Claims

This listing of claims will replace all prior versions, and listings, of claims.

Listing of Claims

1~16. (cancelled).

17. (currently amended) A pixel structure for active matrix OLED display, comprising:

a switching transistor having a control terminal coupled to a scan electrode and a first terminal coupled to a data electrode;

a driving transistor having a control terminal coupled to a second electrode of the switching transistor and a first terminal coupled to a power voltage;

a OLED having an anode coupled to the second terminal of the driving transistor, and a cathode coupled to a common electrode;

a storage capacitor ~~having one terminal coupled to~~ coupled between the control terminal of the driving transistor and the common electrode, controlling turning on/off of the driving transistor according to data stored therein when the switching transistor is turned off; and

a first transistor comprising a first terminal coupled to the anode of the OLED and a second terminal coupled to a first voltage and a control terminal coupled to a control signal, pulling down the potential at the anode of the OLED according to the control signal thereby inducing a reverse current to neutralize carrier accumulation inside the OLED, wherein the first voltage is variable and is determined by the data stored in the storage capacitor and the control signal is applied to turn on the first transistor during an N^{th} frame and an $N+M^{th}$ frame, N and M are both positive integrals and M>1.

18. (previously presented). The pixel structure as claimed in claim 17, wherein the potential of the first voltage is lower than that at the cathode of OLED.

19. (currently amended) An active matrix OLED display, comprising:

at least one pixel, comprising:

a switching transistor having a control terminal coupled to a scan electrode and a first terminal coupled to a data electrode;

a driving transistor having a control terminal coupled to a second electrode of the switching transistor and a first terminal coupled to a power voltage;

a OLED having an anode coupled to the second terminal of the driving transistor, and a cathode coupled to a common electrode;

a storage capacitor to ~~having one terminal coupled to~~ coupled between the control terminal of the driving transistor and the common electrode, controlling turning on/off of the driving transistor according to data stored therein when the switching transistor is turned off; and

a first transistor comprising a first terminal coupled to the anode of the OLED and a second terminal coupled to a first voltage and a control terminal coupled to a control signal, pulling down the potential at the anode of the OLED according to the control signal thereby inducing a reverse current to neutralize carrier accumulation inside the OLED, wherein the first voltage is variable and is determined by the data stored in the storage capacitor and the control signal is applied to turn on the first transistor during a N^{th} frame and a $N+M^{th}$ frame, N and M are both positive integrals and M>1.

20. (previously presented). The active matrix OLED display as claimed in claim 19, wherein the potential of the first voltage is lower than that at the cathode of OLED.

21. (new) A driving method for an active matrix OLED display, wherein the display has at least one pixel, each having a switch transistor, a driving transistor, an OLED and a storage capacitor, the driving method comprising:

providing a first transistor coupled between an anode of the OLED and a first voltage;

turning on the switching transistor to provide a display data on a data electrode to the storage capacitor and the driving transistor according to a scan signal, wherein the

first voltage is variable and is determined by the display data stored in the storage capacitor;

turning on the driving transistor to providing a first current to flow through the OLED of the pixel according to the display data stored the storage capacitor; and

turning on the first transistor to provide a second current to flow through the OLED to neutralize carrier accumulation inside the OLED according to a control signal during an N^{th} frame and an $N+M^{th}$ frame, wherein N and M are both positive integrals, M>1, and the first current and the second current flow in opposite directions.

22. (new). The driving method as claimed in claim 21, wherein the potential of the first voltage is lower than that at the cathode of OLED.